The 2014 Kathleen A. P. Mathias Agriculture Energy Efficiency Program Application Information Q&A

Is this program for me?

1) Who is eligible for this program?

Farms and businesses in the agriculture sector may apply. Examples include dairy, orchard, poultry/egg, greenhouse, vegetable, animal, vineyard, grain dryer, processor, sawmill, and aquaculture. If you are uncertain about your eligibility, call EnSave, the MEA subcontractor supporting the Mathias Agriculture program, at (800) 732-1399 to see if you meet the eligibility requirements.

To be eligible, you will need to show how implementing allowable energy efficiency measures will achieve at least a 20% energy savings in the building(s) you plan to upgrade. The 20% energy savings goal can be achieved using a combination of measures. Refer to the example in question #11 to see how projects can be combined to reach 20% energy savings. Please note:

- This program emphasizes a "whole building" approach that is different from typical energy efficiency upgrades which often focus on gains in efficiency achieved through replacement of an individual measure. With a whole building approach, it is anticipated that multiple measures may be required to achieve at least a 20% savings for the building in which they are implemented.
- In some circumstances an individual measure may be allowed, provided it meets the other criteria. Such an example would be a grain dryer or irrigation system where there is no building involved. If the measure that you wish to upgrade is not attached to or a part of any building, it can qualify as a "standalone" measure. It will still need to have an expected total cost of at least $50,000 (see question #2) and offer at least 20% energy savings. You may also apply with a standalone project and a building project.

2) What size project can apply for a grant?

Your project must cost at least $50,000 in order to apply for this grant. There is no maximum project size, although the maximum grant size is $200,000.

3) If I receive a grant award, how much money should I plan on spending out of pocket?

All awards will be after any other incentives have been applied. Of this final amount, MEA will grant up to 50%. For example:

- $60,000 EE project - $10,000 utility incentive = $50,000 project cost
  - $50,000 – $25,000 (assume 50% Mathias Ag Program rebate) = $25,000 out-of-pocket cost

Note: The 50% Mathias Ag Program grant applies to the applicant's net costs, after utility or other incentives. Any additional funding that comes in after selection for the Mathias Ag Program must be

deducted from the Mathias Ag Program project cost or used to enlarge the scope of the energy efficiency project.

4) Does the grant come with federal compliance requirements?

No. While the fiscal year 2013 Mathias Ag. Program was originally operated using federal funds from the American Recovery and Reinvestment Act (ARRA), the fiscal year 2014 Mathias Ag Program is not federally funded.

5) What does "MEA will showcase these projects as case studies within the agriculture sector" mean?

The intent of the project showcasing is to help other farms and businesses like yours see a "real life" example of the energy and money saving potential of energy efficiency improvements. Information gathered and shared with others who might benefit from your example would include project details such as:

- How much it cost
- How long it took
- The energy savings
- The simple payback
- The leveraged funds

We may provide this information on MEA's web site and/or use your project as the subject of a success story for a newsletter, video, or other marketing vehicle.

MEA also will need to perform monitoring visit(s) to provide technical assistance and ensure the project requirements are fully satisfied (see "Who will be visiting my farm or business?" below). Beyond the requirements outlined above, you will NOT need to open your farm/business to allow individuals to view and inspect your project(s).

6) How will projects be selected?

These factors will be considered in the selection of projects for grant funding:

- Project feasibility – *Can the project be completed in the available construction window (by October 31, 2014)? Will it result in a minimum 20% energy savings? Does the monthly project spending plan include reasonable milestones that ensure expenditure of project funds?*
- Energy savings – *How high are the likely energy savings from the proposed measures?*
- Simple payback – *How many years will it take to recover the cost of the investment without incentives? (Project cost divided by annual energy savings in dollars. For example, a project saving 400,000 kWh per year at $0.10 per kWh and a $50,000 project cost has a simple payback of 1.25 years: $50,000/$40,000=1.25)*
- Amount of matching (leveraged) funds – *Is the applicant tapping additional funding sources to maximize the value of this grant?*
- Accuracy of energy savings and cost information for the project – *Are the assumptions behind the numbers clearly stated to enable the Mathias Ag Program team to evaluate the project (i.e., detailed bids, make and model numbers, efficiency ratings, operational schedules)?*
- Best practices/showcase project – *MEA is looking for projects that demonstrate energy efficiency best practices in order to expand energy efficiency in the agriculture sector.*

MEA also reserves the right to select applications that allow for a broad diversity in the project portfolio. Factors such as measure type, geographic region and agricultural market will be considered.

Preparing an Application

7) I want to take advantage of this opportunity, but I am not an energy expert and am not sure how to figure out my savings or efficiency options. Where can I get help?

Yes, prior to applying you should contact MEA's technical assistance sub-contractor EnSave at 800-732-1399 for application or technical assistance. They can help you determine whether your project will meet the program's requirements.

Accuracy is very important to the review team, as we will only have your application and supporting documentation to use in evaluating the merits of your project before provisionally awarding funding. Since technical and application assistance is available through EnSave at no cost to you, we encourage you to take advantage of this service in order to prepare the strongest possible application.

8) What does "accuracy" mean when it comes to preparing my application?

The review team will use the following energy-related metrics to evaluate your application:

- Percent of energy savings (provide total current and proposed energy use for the project)
- Type of measure (including the make and model numbers in your application is strongly advised)
- Simple payback (specify energy savings of project, total project cost, and cost per unit of energy as reflected in your utility bills)

To help you provide the best possible information, we offer here some examples of less and more accurate data for some key application questions.

Section B, Question 2 of Application: Existing Equipment Description

Less Accurate: Description of location and number and type of existing lighting fixtures

More Accurate: Description of location and number and type of existing lighting fixtures PLUS operating schedule of lighting and wattage

Section B, Question 3: Describe the Proposed Project

Less Accurate: Description of lighting replacement (100 12-watt LEDs)

More Accurate: Description of lighting replacement PLUS make and model number and a specification sheet from the manufacturer.

Section D: Estimated Project Costs and Savings

Less Accurate: Applicants must submit an itemized bid from one or more contractors for all project-related work, including both equipment and labor. Stating project cost and savings

without documentation or without taking advantage of available technical assistance to arrive at the energy savings will result in an incomplete application. If you found equipment costs in a catalog or online, include that information in your application so we can validate the information. Also, provide an estimation of the labor time involved to install the measure(s).

More Accurate: Call EnSave to request assistance with estimating energy savings. For the cost estimate, provide a bid that includes both labor and materials.

9) I only have one meter for my entire operation. How do I figure out the energy used in the building containing my project?

EnSave can help you determine this and will ask a series of questions on a case-specific basis.

10) What are some examples of projects that are likely to qualify and projects that will not qualify?

All projects must achieve at least 20% energy savings (see #1). Higher consideration will be given to projects with a shorter simple payback period.

Below is an example of a building on a farm that proposed replacing four different measures to meet the 20% building energy savings requirement:

Benefits of Recommended Energy Saving Equipment

Equipment	Estimated Annual Electricity Savings (kWh)	Estimated Annual Fuel Savings (gallons)	Estimated Annual Energy Cost Savings	Estimated Cost to the Farm	Estimated Payback in Years
General Lighting	5,602		$580	$850	1.5
Production Building Lighting	45,911		$4,126	$17,300	4.2
Production Building Ventilation	7,113		$711	$4,268	6.0
Air Heating and Building Environment	0	2,462	$4,821	$38,711	8.0
Totals	**58,626**	**2,462**	**$10,238**	$61,129	**6.0**

Here are the energy savings associated with this project:

Fuel Type	Current Usage	Current Use (MMBtu)	Savings	Savings (MMBtu)	% Savings
Electricity (kWh)	222,902	757	58,626	200	26%
Propane (gal)	8,383	771	2,462	225	29%
Totals		**1,529**		**425**	**28%**

11) How do you measure the 20% energy savings gain?

To determine the 20% energy savings, look at the total energy used in the past year at your facility. Then, determine the annual energy savings from your project. Divide the savings by the total current use to determine the percent of savings.

20% Savings Example- Multiple Measures

Proposed Measure	Current Total Farm Energy Use (MMBtu*)	Energy Savings (MMBtu)	% Energy Savings
General Lighting	1,529	18	1.2%
Production Building Lighting	1,529	156	10.2%
Production Building Ventilation	1,529	24	1.6%
Air Heating and Building Environment	1,529	234	15.3%
Totals	**1,529**	**432**	**28.3%**

* Note: we convert all energy savings to a common measurement unit of MMBtu.

From this example, you can see that none of the measures by themselves have 20% savings, but together they do. If the primary equipment you want to install does not achieve 20% savings, consider adding other energy efficiency measures into your project to meet the savings threshold.
439 MMBtu / 1,529 MMBtu = 28% savings

Ineligible Project- Savings is not 20%

Proposed Measure	Current Total Farm Energy Use (MMBtu)	Energy Savings (MMBtu)	% Energy Savings
General Lighting	1,529	18	1.2%
Production Building Lighting	1,529	156	10.2%

Production Building Ventilation	1,529	24	1.6%
Totals	**1,529**	**198**	**13%**

This is the same project as the first example, but without one of the measures. In this scenario the measure mix is not able to achieve 20% savings without the addition of another project.
198 MMBtu/ 1,529 MMBtu = 13% savings

20% Savings Example: Stand-Alone Measure Example

Proposed Measure	Current Energy Use (MMBtu)	Energy Savings (MMBtu)	% Savings
Replace existing grain dryer with a more efficient grain dryer	1,446	368	25%

This is stand-alone measure because the grain dryer (a common example of a "stand-alone" measure) stands by itself and is not part of a larger system. In this scenario the measure is able to achieve over 20% savings.
368 MMBtu/ 1,446 MMBtu = 25% savings

If you are not sure of the annual energy savings from your project, EnSave can provide technical assistance for your application to help determine savings. Projects selected for funding will have the 20% savings verified through either a "desk audit" (analysis of energy savings based on current energy use and proposed project) or a site visit.

12) Q: Are renewable energy projects allowed?
No, renewable energy generation projects are not eligible for this grant program in fiscal year 2014. If you are unsure if a particular technology is potentially eligible for funding through the Mathias Ag. Program, please contact Dean Fisher or Alec Fields.

13) Q: Do I need an audit to apply?
Submission of an energy audit report with your application confers an advantage. However, if you are able to adequately document how your proposed measures would achieve the estimated savings, the project may still be eligible for funding. At a minimum, you will need to know how much energy the building uses annually (this could be based on one year's bills), how much energy the equipment uses that you would like to replace, and how much energy the planned replacement would use. The MEA has structured the application to capture this information.

14) What if I don't have one year's worth of utility bills?
If you do not have these records, your utility history can be obtained from your utility provider. Your utility provider may require you to complete a form in order to provide that information to you.

If the building is being repurposed for alternative use or has been unoccupied, an applicant can create a baseline of energy assuming that installed systems meet current Maryland building code. The upgrade project should be estimated to reduce energy use by 20% from this baseline.

Application Review & Next Steps

15) What happens after I submit my application?
The Mathias Ag Program team will review your application. For each application, we will make one of four determinations:

a. Provisionally accept your project, and require additional information to calculate the energy savings.
b. Provisionally accept your project, and require an on-site comprehensive energy audit to calculate the energy savings.
c. Place your project on a waiting list in the event another provisionally selected project does not get completed as anticipated.
d. Reject your project if it does not meet baseline criteria such as 20% energy savings.

16) What is the process after applications have been selected?
MEA will send out letters informing all applicants if their project was or was provisionally accepted, rejected, or placed on the waiting list. For the projects that were selected, the letter:

- Explains the next steps in calculating energy savings;
- May ask you to solicit bids for your project (if you did not do so with your application);
- Provides instructions about meeting various preliminary project requirements within a prescribed time window.

When energy savings are verified, a viable bid is secured, and the preliminary requirements are met, MEA will issue the award, provide a contract for signature, and formally approve the project. *You must not sign a contract with a bidder, purchase equipment or start work until you have received final approval to proceed. Doing so will jeopardize your grant award.*

17) If selected, why do I have to go through a bid process?
The bid process is designed to assure that the bid request exactly matches the scope of the approved project and that the contractor's bid reflects all the costs associated with the project.

18) Will I be informed if my project is rejected?
Yes, MEA will contact all applicants letting them know their project's selection status.

19) Who will be visiting my farm or business?
If you will receive an audit, a qualified energy auditor contracted with MEA may come to your farm or business to collect information needed to accurately estimate the project's projected energy savings. MEA or its contractors may also visit your site to perform a post-installation site inspection of your project, or to install data loggers needed for measurement and verification activities. During one of these visits, photos may be taken that may be used in promotional materials to showcase your energy efficiency project.

Prior to visiting, MEA and/or MEA's contractors will first call to make an appointment before visiting your farm or business. Both MEA and MEA's subcontractors will heed safety and/or biosecurity requirements. Participation in the program requires you to grant MEA or its representative(s) permission to use photos of your farm or facility, as well as data presented in your final energy evaluation or audit report for marketing, publicity, and advertising purposes. Subject to the

requirements of the Maryland Public Information Act, § 10-611 et seq. of the State Government Article, MEA and its representatives will not divulge any confidential information or trade secrets. You have the right to review and approve any photos taken of your facility.

Project Compliance

20) What are the compliance issues of which I should be aware?

This program is funded from the portion of the State of Maryland's Strategic Energy Investment Fund (SEIF) allocated for energy efficiency activities. Maryland state regulations apply. The following terms must be met:

- Businesses must be in good standing in the State of Maryland. For Certificate of Status information please see the Maryland State Department of Assessments and Taxation webpage.
- Historic review exemption must be secured through the Maryland Historic Trust. MEA will facilitate this review on behalf of successful applicants.
- An authorized signatory for the applicant business must sign the application.
- Work performed or materials purchased before you have received a copy of your executed grant (signed by both parties) are not eligible for reimbursement.
- All reimbursements will be paid in arrears. Payment will be approved only after MEA has determined the work has been installed satisfactorily to the grant's terms and conditions.
- All grantees will be expected to submit progress reports on a monthly basis.